REMARKS/ARGUMENTS

I.   STATUS OF CLAIMS

Claims 1-14, 28-41 and 55-68 are rejected by the Office Action. Claims 3, 5-8, 14, 30, 32-35, 41, 57, 59-62, and 68 have been amended.

II.   CLAIM REJECTIONS – 35 U.S.C. § 103

The Office Action rejected Claims 1-10, 12-14, 28-37, 39-41, 55-64 and 66-68 under 35 U.S.C. § 103(a) as being unpatentable by Zigmond et al (US 6,400,407) in view of Browne et al (WO 92/22983) in further view of Iggulden (US 6,404,977) in further view of Gibson (US 6,313,854). The rejection is respectfully traversed.

Claims 1, 28, and 55 appear as follows;

1.   A process for frame specific tagging of media streams with tag translation at a receiver, comprising the steps of:
      receiving a media stream at said receiver;
      storing said media stream on a storage device on said receiver;
      detecting frame-specific tags inserted into said media stream;
      processing said tags;
      displaying program material in said stored media stream from said storage device to a viewer;
      wherein said processing step performs appropriate actions in response to said tags which include command and control information instructing said receiver to perform certain actions.

28.   An apparatus for frame specific tagging of television audio and video broadcast streams with tag translation at a receiver, comprising:
      a storage device on said receiver;
      a module for receiving said media stream at said receiver;
      a module for storing said media stream on said storage device;
      a module for detecting frame-specific tags inserted into said media stream;
      a module for processing said tags;
      a module for displaying program material in said stored media stream from said storage device to a viewer;
      wherein said processing step performs appropriate actions in response to said tags which include command and control information instructing said receiver to perform certain actions.

55.   A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for frame specific tagging of television audio and video broadcast streams with tag translation at a receiver, comprising the steps of:

receiving said media stream at said receiver;

storing said media stream on a storage device on said receiver;

detecting frame-specific tags inserted into said media stream;

processing said tags;

displaying program material in said stored media stream from said storage device to a viewer;

wherein said processing step performs appropriate actions in response to said tags which include command and control information instructing said receiver to perform certain actions.

Applicant reiterates that Iggulden does not teach or disclose the detection and processing of frame specific tags as the Office Action states. The Office Action states "The tags are referred to as event markers and further send instruction to the receiver on commands such as muting the broadcast segment as described in column 16, lines 14-58." However, Iggulden does not teach what the Office Action states.

Iggulden's event markers are not tags as the Office Action posits. Iggulden clearly defines the event markers as video frames combined with low audio that are used to separate segments. The black or colored frames, for example, are typically inserted by broadcasters in order to give a few frames of time so the local broadcasters can trigger their commercial insertion editors as the broadcast program is broadcasted from the local broadcaster. Iggulden gives examples, e.g., in North America, the method may, for example, identify a period of one or more black frames combined with low audio as being an event marker representative of the beginning of a segment. These event markers carry no information and further, are not tags, but rather, a detected combination of empty video frames and audio portions. Col. 6, line 53-col. 7, line 1 state (emphasis added):

"Depending upon the implementation, the method identifies the beginning of a received segment by detecting pre-determined **event markers** which separate segments. When implemented for use in North America, **the method may, for example, identify a period of one or more black frames combined with low audio as being an event marker representative of the beginning of a segment**. When implemented for use in Europe, the method may further identify periods of one or more colored frames, such as blue frames, combined with low audio as being an event marker. When implemented for use in Japan, is the method may instead identify a frame break combined with a period of low audio as being an event marker. In any case, once an event marker denoting the

beginning of a broadcast segment is detected, the method promptly detects a signature from the segment for comparison against stored signatures."

Iggulden further states that when he detects a signature, it is not accurate and some of the intended material that is supposed to be excluded from recording is recorded. This means that Iggulden teaches away from frame-specific tags by teaching that his signature detection is an estimation and not accurate. Col. 7, lines 5-10 state (emphasis added):

> "By detecting the signature near the beginning of the segment, the signature can be compared against stored signatures to allow the VCR to be paused **before much of the received segment has been recorded**. Preferably, the signature is based on frames appearing during the first one second of the segment."

Iggulden further supports the fact that his signature detection is not accurate in col. 16, lines 36-42 (emphasis added):

> "Hence, the television signal is not stored or otherwise delayed but is immediately output in real-time. The broadcast segment signature evaluation process is performed shortly after detection of the event marker **such that very little of the television signal is output before a determination of whether the signal needs to be muted is achieved**."

Additionally, Iggulden's signatures are a calculation performed at the time the signal is received and do not carry any command or control information. Col. 10, lines 40-52 state:

> "Each unique broadcast segment has a unique signature. The signature may be any unique characteristic of the segment that can be used to distinguish one segment from another. As will be described below, in the exemplary implementation, the signature is a bit string hash code representative of whether each of a set of selected lines of a selected frame of a received segment has an average luminance level that exceeds a pre-determined threshold. The selected frame may be, for example, the tenth frame following the completion of the event marker marking the beginning of the segment. The selected lines may be, for example, the first 64 odd lines of the frame beginning at line 23. Other signatures may alternatively be employed."

Therefore, Iggulden does not teach or disclose what the Office Action states.

Further, Gibson's invention is in a different technical area than Zigmond, Browne, and Iggulden. Gibson's invention involves Web pages and HTML coding. Gibson's use of the term "frames" is technically different and in a different field than video frames. For example, video frames in an MPEG stream are I, B, and P frames or a series of lines in an analog broadcast transmission. Gibson clearly defines Web browser frames as multiple fields within a single

browser window and describes how to create frames in HTML. Col. 3, line 53-col. 4, line 35

state:

> "One innovation in web browsers allows the simultaneous display of multiple fields or "frames" within a single window, as illustrated in FIG. 3. Browser window 16 on computer display 2 contains three frames 17a, 17b and 17c which divide the web page into multiple scrollable regions. Frames can be created via HTML using the "FRAMESET" tag which specifies exactly how the frames will appear on the web page, and the "FRAME" tag which defines the various aspects of each frame, including which particular URL to load in the frame. The "COLS" and "ROWS" attributes placed within the FRAMESET tag dictate how the page is to be arranged. For example, the tag <FRAMESET COLS="50%, 50%"> divides the browser window vertically into two equal halves (one frame on the left, and one frame on the right).

> Frames are not child windows; that is, they are not resizable or otherwise controllable, since their attributes are fixed by the HTML coding. This aspect of frames can be very frustrating, because certain frames often take up so much of the web browser display area that other important frames are difficult to examine. In the example of FIG. 3, the web page has been constructed to provide one frame (17a) with a few control buttons or hypertext links to other pages at the web site, another frame (17b) having an advertisement, and the third frame (17c) containing the information which is of actual interest to the user. As a result, the viewable area assigned to frame 17c is considerably small, making the contents more difficult to read. This smaller presentation area can also make it more difficult to scroll through the frame using the scroll button. These difficulties are exacerbated when the parent browser window uses less than the full display area (i.e., the browser is in a restored state). Additionally, the advertisement in frame 17b might be presented with automated blinking, scrolling or highlighting which is very distracting, and can be particularly aggravating since that frame cannot be removed or reduced in size. Moreover, the web site may be designed such that the unwanted advertisement frame 17b persists even when other files are loaded into the other frames.

> Older web browsers do not support frames, so some web sites give the user an option of downloading two pages that are generally similar except that one page uses frames and the other does not (two different hypertext links are provided to the alternate pages). This option allows the user to avoid the aforementioned problems with frames, but not all web sites provide this option. Furthermore, this approach results in the user losing any advantages of frames which may be desirable to some extent. In FIG. 3, for example, the user may want to keep the set of links in frame 17a available while loading other pages in frame 17c."

Gibson further describes his use of frames in the context of windowed frames in an

HTML file environment. Col. 4, line 56-col. 5, line 12 states:

> "The foregoing objects are achieved in a method of accessing an electronic page on a computer system, generally comprising the steps of ascertaining that the electronic page is adapted to be displayed as a single window containing a plurality of frames (having fixed attributes), displaying a plurality of windows on a display device of the

computer system, wherein each window corresponds to a respective one of the frames, and enabling one or more window operations for each of the windows, such as the operations of individually resizing, minimizing, maximizing, and closing each of the windows. The windowed frames can be displayed as child windows within a parent window on the display device, or in separate parent windows. The frame windowing mode can be toggled between active and inactive states. Initial attributes of the windows can be based on the frame attributes of the respective frames. These attributes can be ascertained by interpreting tags in a main computer file associated with the electronic page.

The present invention is particularly useful when implemented in a web browser which retrieves framed electronic pages via the Internet using, e.g., HTML files. With the present invention, users can more effectively manipulate and manage the viewable area of the browser while preserving the advantages of frames."

Other than a keyword match of the term "frames", Gibson's invention has no relationship with video frames. Gibson's tags are clearly defined as HTML tags which are incompatible with video frame tagging as described in the Specification. One of ordinary skill in the art at the time of the invention would not have been able to combine HTML tags with Iggulden's event markers because the two concepts are technically incompatible.

Therefore, it would not have been obvious to one of ordinary skill in the art at the time of the invention to combine Gibson with Iggulden and further with Zigmond and Browne.

Therefore, Zigmond in view of Browne in further view of Iggulden and further in view of Gibson does not teach or disclose the invention as claimed.

Claims 1, 28, and 55 are allowable. Claims 2-10, 12-14, and 29-37, 39-41, and 56-64, 66-68 are dependent upon Claims 1, 28, and 55, respectively, and are allowable. Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

III.   CLAIM REJECTIONS – 35 U.S.C. § 103

The Office Action rejected Claims 11, 38, and 65 under 35 U.S.C. § 103(a) as being unpatentable by Zigmond et al (US 6,400,407) in view of Browne et al (WO 92/22983) in further view of Iggulden (US 6,404,977) in further view of Gibson (US 6,313,854) in further view of Dunn et al. (US 5,648,824).

The rejection under 35 U.S.C. §103(a) is deemed moot in view of Applicant's comments regarding Claims 1, 28, and 55, above. Claims 11, 38, and 65 are dependent upon independent Claims 1, 28, and 55, respectively. Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

IV.   MISCELLANEOUS

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

The Applicants believe that all issues raised in the Office Action have been addressed and that allowance of the pending claims is appropriate. Entry of the amendments herein and further examination on the merits are respectfully requested.

The Examiner is invited to telephone the undersigned at (408) 414-1080 ext. 214 to discuss any issue that may advance prosecution.

No fee is believed to be due specifically in connection with this Reply. To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. § 1.136. The Commissioner is authorized to charge any fee that may be due in connection with this Reply to our Deposit Account No. 50-1302.

Respectfully submitted,

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